at least one drive mechanism;

at least two fluid containers operably associated with the at least one drive mechanism, one fluid container containing a contrast medium and the other fluid container containing a flushing medium; and

a control device operably associated with the at least one drive mechanism, the control device operable to selectively program a plurality of phases of an injection procedure, each of the phases comprising one of at least a contrast medium phase and a flushing medium phase. --

- The apparatus of Claim 4 wherein at least one of the two fluid containers comprises a syringe. --
- The apparatus of Claim 4 wherein the first phase comprises a flushing medium phase and the second phase comprises a contrast medium phase. --
- The apparatus of Claim 4 wherein the phases are defined by at least two injection parameters selected from fluid flow rate, fluid volume and injection duration. --
- The apparatus of Claim 4 wherein each of the plurality of phases comprises at least one of a contrast medium phase, a flushing medium phase and a KVO phase. --
 - A fluid injection apparatus comprising:

at least one drive mechanism;

at least one fluid container operably associated with the at least one drive mechanism; and

a control device operably associated with the at least one drive mechanism, the control device operable to selectively program at least two phases of an injection procedure, the first phase comprising one of at least a contrast medium phase and a flushing medium phase and the second phase comprising a pre-programmed hold phase.

-- 10. The apparatus of Claim 9 wherein the hold phase is of indefinite duration.

-- 11. The apparatus of Claim 9 wherein KVO occurs during the hold phase. --

-- 12. The apparatus of Claim 9 wherein the hold phase allows an operator to modify one or more injection parameters of a subsequent phase. --

-- 13. The apparatus of Claim 9 wherein the at least one fluid container comprises a syringe. --

-- 14. A fluid injection apparatus comprising: at least one drive mechanism;

at least two fluid containers operably associated with the at least one drive mechanism, one fluid container containing a contrast medium and the other fluid container containing a flushing medium; and

a control device operably associated with the at least one drive mechanism, the control device operable to selectively program at least a first phase, a second phase and a programmable pause phase of an injection procedure, the first phase comprising one of a contrast medium phase and a flushing medium phase, the second phase comprising one of a contrast medium phase and a flushing medium phase and the pause phase being programmed to occur between the first and second phases. --

- -- 15.\ The apparatus of Claim 14 wherein the pause phase is programmable for a fixed duration of time. --
- -- 16. The apparatus of Claim 14 wherein the second phase automatically commences after the end of the pause phase. --
- -- 17. The apparatus of Claim 14 wherein at least one of the two fluid containers comprises a syringe. --
- -- 18. A method of programming an injection procedure, comprising:

 providing an injection apparatus comprising a drive mechanism, at least two fluid containers and a control device for programming the injection procedure;

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selectively programming a first phase of the injection procedure, the first phase comprising one of a contrast medium phase and a flushing medium phase; and selectively programming at least a subsequent second phase of the injection procedure, the second phase comprising one of a contrast medium phase and a flushing medium phase. --

-- 19. The method of Claim 18, further comprising: selectively programming a KVO phase. --

-- 20. A method of programming an injection procedure, comprising:

providing an injection apparatus comprising a drive mechanism, at least one fluid
container and a control device for programming the injection procedure;

selectively programming a first phase of the injection procedure, the first phase comprising one of at least a contrast medium phase and a flushing medium phase; and selectively programming at least a subsequent second phase of the injection procedure, the second phase comprising a pre-programmed hold phase. --

- -- 21. The method of Claim 20 wherein the hold phase allows an operator to modify one or more injection parameters of a subsequent phase. --
- -- 22. A method of programming an injection procedure, comprising:

 providing an injection apparatus comprising a drive mechanism, at least two fluid containers and a control device for programming the injection procedure;